UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,495	06/30/2003	Stefaan Jozef De Cnodder	Q76292	8654

23373   7590   03/16/2007
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EXAMINER
CHOU, ALBERT T

ART UNIT	PAPER NUMBER
2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/608,495	DE CNODDER ET AL.
	Examiner	Art Unit	
	Albert T. Chou	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 June 2003*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7-9 and 12-14* is/are rejected.

7)☒ Claim(s) *5,6,10 and 11* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 June 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☒ All   b)☐ Some *   c)☐ None of:

   1.☒ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 7-9 and 12-14 are rejected under 35 U.S.C. 103(a) as being

unpatentable over "A Method for MPLS LSP Fast-Reroute Using RSVP Detours" by

Gan et al., IETF, Internet Draft, draft-gan-fast-reroute-00,txt, April 10, 2001 (hereinafter

"Gan").

Regarding claim 1, Gan teaches a method to release, by means of a Path_Tear

Message, a Label Switched Path (LSP) established between linked routers of a

telecommunication network **[Sec. 1, Introduction; page 1 – page 2, lines 1-24]**,

said routers being linked in cascade according to a Main Path and being further

linked in another order according to at least one Detour Path **[Fig. 1; page 3, lines 1-19]**,

characterized in that said Path_Tear Message indicating, to the router receiving

said Path_Tear Message, whether said Path_Tear Message should be immediately

forwarded towards a downstream-located router **[page 10, lines 16-23]**.

Gan does not expressly teach whether said Path_Tear Message includes a tag.

However, It would have been obvious to a person of ordinary skill in the art at the time of the invention to recognize that in RSVP-TE operation, a Path_Tear message, by itself, is a signal, an indication, or a tag indicating that a path along a node receiving the Path_Tear message is going down, and, therefore the receiving node should immediately forward the Path_Tear message toward its downstream router for preparation of tearing down the path.

The motivation for using Path_Tear message itself as a signal, an indication, or a tag would be to simplify the implementation of Path_Tear message and to quickly enable a detour node, without checking extra indicators, to propagate to both main and detour LSP's before it tears down both the main and the detour LSP's.

Regarding claim 2, Gan teaches the release method characterized in that said Path_Tear Message is received, in the receiving router, via a said Detour Path linking an upstream-located router to said receiving router **[Fig. 1, Sec. 2 Operation Overview, page 2 – page 3, line 19, page 10, lines 16-23]**.

Regarding claims 3 and 8, Gan teaches the release method characterized in that said tag indicates through which of said Main Path or said Detour Path or both, starting from the receiving router, said Path_Tear Message should be immediately forwarded towards said downstream-located router **[Fig. 1, Sec. 2 Operation Overview, page 2 – page 3, line 19, page 10, lines 16-23]**.

Regarding claims 4 and 9, Gan teaches the release method characterized in that,

for said router receiving said Path_Tear Message, said release method further

comprises a step of releasing all the Label Switched Paths (LSP) arriving at this

receiving router from upstream-located routers via said Main Path and via said Detour

Path linking said upstream-located routers and said receiving router **[Fig. 1, Sec. 2**

Operation Overview, page 2 – page 3, line 19, page 10, lines 16-23].

Regarding claims 7 and 14, Gan teaches a telecommunication network with a

plurality of routers interconnected via links through which Label Switched Paths (LSP)

are established **[Sec. 1, Introduction; page 1 – page 2, lines 1-24]**,

said routers being linked in cascade according to a Main Path and being further

linked in another order according to at least one Detour Path **[Fig. 1; page 3, lines 1-**

19],

and said routers being adapted to transmit a Path_Tear Message towards

downstream-located routers, said Path_Tear Message indicating that a Label Switched

Path (LSP) has to be released **[page 10, lines 16-23]**,

characterized in that the router transmitting said Path_Tear Message is adapted

to indicate **[page 10, lines 16-17]**, to the router receiving said Path_Tear Message,

whether said Path_Tear Message should be immediately forwarded towards a

downstream-located router **[page 10, lines 19-23]**,

and in that the receiving router is adapted to detect said tag in said received

Path_Tear Message, to release each Label Switched Path and to forward immediately

said Path_Tear Message towards said downstream-located router **[page 10, lines 16-**

23].

Gan does not expressly teach whether said Path_Tear Message includes a tag

and immediately forwards said Path_Tear Message according to said tag.

However, It would have been obvious to a person of ordinary skill in the art at the

time of the invention to recognize that in RSVP-TE operation, a Path_Tear message, by

itself, is a signal, an indication, or a tag indicating that a path along a node receiving the

Path_Tear message is going down, and, therefore the receiving node should

immediately forward the Path_Tear message toward its downstream router for

preparation of tearing down the path.

The motivation for using Path_Tear message itself as a signal, an indication, or a

tag would be to simplify the implementation of Path_Tear message and to quickly

enable a detour node, without checking extra indicators, to propagate to both main and

detour LSP's before it tears down both the main and the detour LSP's.

Regarding claim 12, Gan teaches both said Main Path and at least one Detour

Path arrive at said receiving router **[Fig. 1; page 3, lines 1-19]**.

Regarding claim 13, Gan teaches said telecommunication network is a Multi-

Protocol Label Switching [MPLS] telecommunication network **[Title: A Method for**

MPLS KSP Fast-Route Using RSVP Detours; page 1, line 1].

Allowable Subject Matter

2.   Claims 5, 6, 10 and 11 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Conclusion

3.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

- US Patent Application Pub. No. 2002/0112072 A1 by Jain discloses "System

    And Method For Fast-Rerouting Of Data In A Data Communication Network"

- US Patent Application Pub. No. 2003/0229807 A1 by Qiao et al. disclose

    "Segment Protection Scheme For A Network"

4.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert T. Chou whose telephone number is 571-272-6045. The examiner can normally be reached on 8:30 - 17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Albert T. Chou
March 12, 2007 Ac

CHI PHAM
SUPERVISORY PATENT EXAMINER 3/13/07